

REMARKS

Concerning the rejection under 35 U.S.C. § 112, second paragraph, relating to the meaning of the element “itself”, it should be noted that the expression “parallel to itself” refers to the displacement of the pivot axis of the platform, said pivot axis displacing parallel to itself. Applicants have proposed a clarifying amendment to claims 18 and 21 to better state this relationship. The §112 rejections of claims 18, 19 and 21 are now deemed to be moot.

Regarding the rejection of claim 18 as being anticipated under 35 U.S.C. § 102(b) by Wiegand et al, the following remarks are respectfully submitted for consideration.

The Examiner considers that the object of claim 18 is anticipated by Wiegand et al, by referring to Figure 10 of Wiegand, where 6a is the auxiliary carriage and the end of the platform is the transmission structure.

However, according to claim 18 of the present application, the auxiliary carriage is part of an auxiliary structure “for imparting to the terminal element of pivoting movement.” In the embodiment according to Figure 10 of Wiegand (see col. 5, lines 50 to 53), the platform can not be subjected to a pivoting movement. It is clearly written that “the platform 1 can only be moved into the three Cartesian spatial directions.” Accordingly, it is clearly wrong to consider the carriage 6a as an equivalent to the present application’s “auxiliary carriage.” There is no pivoting movement in the embodiment of Figure 10 of Wiegand and no carriage of Wiegand can be called an “auxiliary carriage for imparting to the terminal element of pivoting movement.”

It should be again restated here that present claim 18 separately claims a support and drive structure for moving the terminal element, and an auxiliary structure for pivoting the terminal element, whereas in Wiegand et al., the functions of the carriages and their legs are not differentiated.

As a matter of fact, it is very clear that if in the embodiment of Figure 10 of Wiegand carriage 6a is displaced on its guiding track 7b without displacing the other carriages, the parallelograms of the two legs formed by the bars 4e, 4f and 4c, 4d will be deformed in such a manner that the platform 1 will move by translation while staying parallel to itself, and by moving away or moving closer to the base 2 *without imparting any pivoting movement*.

Furthermore, the embodiment of Fig. 10 of Wiegand necessitates that the geometry of the system be very accurate to avoid any risk of locking. This is confirmed by column 6, lines 1 to 8, of Wiegand:

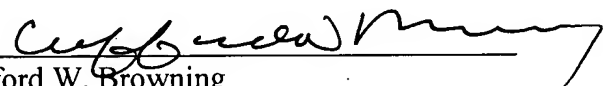
“In the embodiment of FIG. 10 error in parallelism of the linear tracks, geometric deviations of the position of the articulation points and errors in the length of the rods lead to angular errors in the movement of the platform that cannot be compensated by control 8. For this reason, it can make sense to provide means on the carriages that allow the control 8 to change the position of the joints on a carriage in respect to each other or in respect to the carriage.”

The author of Wiegand was aware of the limits of the embodiment according to Figure 10 and confirmed it in the same column 6, lines 9 to 14, and further by lines 14 to 18, where it is proposed to replace the concerned embodiment by the embodiment of Figure 11. In said latter embodiment, the carriages are arranged to allow three supplementary degrees of freedom to the platform, but in this embodiment the system is totally different from the device of claim 18 of the present invention. The embodiment of Figure 11 of Wiegand is much heavier, with a control that is much more complex.

The above considerations clearly demonstrate that the device of claim 18 of the present application is not anticipated by the embodiment of Figure 10 and the carriage 6a of Wiegand, nor by any other described embodiment therein.

For all these foregoing reasons, Applicants respectfully request entry of the foregoing amendments to Claim 18 and 21 under Rule 116, reconsideration of the present application in light of the foregoing remarks, and allowance of Claims 18, 19 and 21, as amended, over all the prior art of record.

Respectfully submitted,

By: 
Clifford W. Browning
Reg. No. 32,201
Krieg DeVault LLP
One Indiana Square
Suite 2800
Indianapolis, IN 46204
(317) 238-6203